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U. S. DEPARTMENT OF AGRICULTURE Agricultural Marketing Service

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U. S. DEPARTMENT OF COMMERCE
Weather Bureau

The Weather Fall and Winter 1958 - 1959

Seasonal temperatures prevailed over most of Montana during October, but precipitation was deficient except for local areas in the north central and southeast. On October 20-21, a severe storm spread over the eastern third of the State. In the northeast portion winds were severe, with peak velocities up to 85 m.p.h. which resulted in considerable soil erosion and some property damage. In the south half, the winds were not quite so strong, but freezing rain followed by heavy, wet snow resulted in large accretions of ice and snow on power and telephone lines, damaging thousands of poles and breaking lines. There was some drifting snow. Four persons met death, three directly - one indirectly, from this storm and there was some property and livestock loss. The first half of November was mild, but cold and stormy the last half, with record snowfall in the north portion. Precipitation was heavy in all but the southwest division. December was warm in all sections except the eastern part. Precipitation was average or above in all divisions except the northeast and southwest. The coldest weather of the winter occurred the first few days of January, and cold continued in the north central and eastern divisions all month. Snow was heavy in the west and central portions and about average elsewhere. There were no severe storms during February, but the month was unusually cold and precipitation was seasonably heavy in all areas. March was warmer than usual and precipitation was light, but it was quite windy most of the month along the eastern slopes of the Divide.

Water-Supply Forecast as of April 1, 1959

West of the Continental Divide: The water supply for the yearly period ending
September 30, 1959 is expected to range from 109
percent of the 1938-52 average on the Kootenai at Libby, up to 130 percent on the
Flathead River, south fork near Columbia Falls. Other stream flows expected are 119
percent at the mouth of the Bitterroot, 121 percent Flathead at Polson, 118 percent
on the Clark Fork at Thompson Falls. Flow on other major streams is expected to
range from 119 to 121 percent. Even should subsequent precipitation be light, water
supplies for irrigation should be more than adequate during the 1959 crop season.

East of the Continental Divide: The Milk River streamflow is expected to be 134 percent of the 1938-52 average at Eastern Crossing, and should have an inflow into Tiber Reservoir of 115 percent. The forecast inflow of the Missouri River into Canyon Ferry Reservoir is 90 percent of the 15-year average, and 96 percent into Fort Peck Reservoir. In the southwestern portion, forecast streamflows vary from as low as 83 percent on the Red Rock River near Monida, up to 97 percent on the Beaverhead at Barratts. The expected Tongue River flow is 70 percent of the 15-year average, and the Yellowstone at Sidney 87 percent of average. Water supplies are not expected to be so favorable as west of the Divide, but should prove adequate unless growing season rainfall is much below normal.

Crop and Livestock Progress

As the result of below normal precipitation in August, September, and October moisture supplies were short in most counties east of the Divide when the winter wheat crop was sown. The dryness impeded germination and stands were only fair in most areas and poor in some northeastern counties. Conditions were more favorable in the western districts where moisture reserves were ample. Warm, dry fall weather facilitated harvesting operations, although digging sugar beets was slowed somewhat by rain and low temperatures in late October. Generally, mild winter weather permitted more than the usual amount of grazing and livestock were maintained in a good condition. Supplemental feeding was intermittently heavy after the first of

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the year, especially during February, but hay supplies were sufficient to meet needs in most areas. Nearly all of the old grass is gone and growth of new grass has been delayed by cold weather. Above normal precipitation since January has provided adequate soil moisture in most of the State. Crop prospects are generally favorable except in some scattered areas where it has been too dry. Spring field work is under way and planting of grain and sugar beets is well along. Calving and lambing operations have passed the peak and shearing sheep is about half done.

6-Month Total Precipitation, October 1958 - March 1959 (Inclusive)
WESTERN DIVISION

		MESTEUM	DIVISION		
		6-Month			6-Month
	Precipi-	Long-term		Precipi-	Long-term
Stations	tation	mean	Station	tation	mean
Alberton	13.75		Missoula 2 WNW	7.58	5.19
Big Fork 12 S	13.25		Missoula WBAS	8.38	5.67
Creston	10.86		Ovando 1 SW	12.18	8.13
Darby	8.78	8.33	Ovando 7 WNW	8.01	- -
Drummond	4.84	3.78*	Philipsburg	4.06	5.50
East Anaconda	5.03	4.78	Pleasant Valley	13.59	11.03
Elliston	6.63	4.10	Polebridge	16.41	
Essex	35.13		Polson Kerr Dam	8.94	
Fortine 1 NNE	10.42	8.30		12.66	
			Rexford RS		e e1
Hamilton	7.18	5.51	Saint Ignatius	8.85	5.54
Haugan	29.56	21.98	Seeley Lake RS	18.18	/ 30
Heron	27.74	24.23	Stevensville	7.19	6.18
Hungry Horse Dam	24.24	504 ATM	Summit	28.50	4 / 5
Kalispell WBAS	9.27	7.71	Superior	11.28	8.69
Kalispell	10.69		Thompson Falls PH	18.35	12.42
Libby RS 1 NE	13.22	11.77	West Glacier	19.91	16.18
Lonepine LWNW	8.50	5.81	Yaak	16.29	
		SOUTHWESTER	N DIVISION		
Alder 17 S	1.27		Hebgen Dam	14.61	14.63
Belgrade FAA AP	3.11	4.78*	Jackson	4.22	
Boulder State School	3.24		Lakeview	6.78	
Bozeman Agr. College	6.68	6.64	Lima	•73	2.87
Bozeman 12 NE	16.58	0 0 0 0 0 0	Norris 3 ENE	3.49	
Butte School of Mines			Norris Madison PH	7.32	5.75
Butte FAA AP	2.03	3.99	Trident	3.04	2012
Dell 12 SSW	.90	2011	Twin Bridges	2.29	
Dillon FAA AP	1.38	2.14*	Virginia City	3.04	4.51
Dillon WMCE	1.82		Whitehall FAA AP	1.58	2.05*
		3.34	Wisdom		2.05"
Divide 2 NW	2.99	0.00	MISCOU	3.91	
Enniș	2.31	2.29	AT DIUTCION		
Babb 6 NE			AL DIVISION	0.00	
	7.75	6.08	Goldbutte 7 N	2.93	2 00
Big Sandy	4.95	2.73	Harlem	5.27	3.23
Blackleaf Brady (Aznoe)	6.39		Havre WBO	5.40	3.27
Browning	2.65 6.27	4.61	Hays	7.14	
Chester	2.95	4.01	Joplin 1 N Loma	2.87 4.80	
Chinook	4.93	3.27	Lonesome Lake	4.71	
Choteau	2.81	2.06	Malta	5.56	3.01
Cleveland 5 ENE	4.01		Shelby	3.77	7.01
Cut Bank FAA AP	3.42	2.43	Shonkin 7 S	12.68	
Dunkirk 14 NNE	3.31	2.71	Simpson 4 NNW	2.83	1.98
Fairfield	4.75	2.20	Sweetgrass	3.95	
Forks 5 NE	2.85	0.5/	Telegraph Creek	4.02	
Fort Assinniboine	5.58	2.56	Tiber Dam	2.51	
Fort Benton	8.28	4.33*	Turner	4.44	
Geraldine	7.56		Valier	3.09	2,51

*Means for short-term period of record 1955.

6-Month Total Precipitation, October 1958 - March 1959 (Inclusive)

Station	Precipi- tation	6-Month Long-term mean NORTHEASTER	Station RN DIVISION	Precipi- tation	6-Month Long-term mean
Bredette Circle 7 N Culbertson Fort Peck PH Frazer Glasgow WBAS Glendive Haxby 18 SW Hinsdale Jordan Lambert Lustre 4 NNW Medicine Lake 3 SE	2.10 3.42 3.93 3.03 2.50 2.79 3.50 5.54 2.48 5.06 3.05 2.08 3.61	2.06 2.58 3.35 3.19 2.89 3.11 2.48 2.03 2.34	Mosby 23 N Nohly 3 WNW Opheim 12 SSE Poplar Raymond Border Sta. Redstone Richey Savage Scobey Sidney Thoeny Vida Wolf Point 4 ESE	4.67 3.26 .79 2.45 1.55 1.86 3.85 3.31 2.92 3.68 2.93 4.57 3.29	2.18 2.50 2.67
		SOUTHEASTE	RN DIVISION		
Albion Birney 2 SE Boyes Brandenberg Broadus Colstrip Ekalaka Forsyth 2 E Ingomar 11 NE Lame Deer	3.10 5.10 3.96 6.61 5.13 7.86 4.26 4.06 4.24 7.69	3.76* 4.73 2.95	Mildred Miles City Miles City FAA AP Moorhead Plevna Ridgway Rock Springs Terry Wibaux	4.10 5.36 5.09 5.19 3.55 4.09 5.10 2.37 3.91	2.89 3.47 3.05

^{*}Means for short-term period of record through 1955.

P. J. Creer, Agr. Statistician in Charge Agricultural Marketing Service-USDA

R. A. Dightman, State Climatologist Weather Bureau-U.S. Dept. of Commerce

6-Month Tota	l Precipitat		per 1958 - March 1959	(Inclusive	
		6-Month			6-Month
	-	Long-term		Precipi-	Long-term
Station	tation	mean	Station	tation	mean
		TA CIMINGED	DILITATAN		
м.		CENTRAL	DIVISION		
Augusta	5.60	3.66	Lincoln RS	13.21	
Austin 1 W	5.68	J. 00	Loweth	5.49	3.96
Barber	3.48		Martinsdale	4.31	2.98*
Canyon Ferry PH	2.71		Melstone	5.53	3.34
Cascade 5 S	4.56	3.87	Moccasion Exp. Sta.	3.38	3.22
Cascade 20 SSE	4.86	2001	Raynesford	5.21	
Flatwillow 4 ENE	4.47	3.06	Roundup	2.95	2.77
Gibson Dam	11.27	5.30	Roy 8 NE	4.54	~***
Grass Range	6.47	7.5	Stanford 2 NE	4.54	3.82
Grass Range 15 NNE	4.44		Sun River 5 SW	3.59	3.00
Great Falls WBAS	5.87	4.20	Toston 3 SW	1.82	
Harlowton	3.09	,	Townsend	1.48	
Helena WBAS	3.53	3.60	Unionville	7.98	
Holter Dam	3.82	3.52	White Sulphur Springs		7.42
Kings Hill	19.65		Winifred	6.31	3.68
Lewistown FAA AP	5.41	4.68	,		
	S	OUTH CENT	RAL DIVISION		
777	_			. ~/	0 41 4
Ballantine	4.48	3.65	Livingston FAA AP	4.56	3.84*
Big Timber	3.66	4.44	Mystic Lake	10.01	8.99
Billings Water Plant			Nye	6.03	
Billings WBAS	5.59	4.30	Nye (Mouat Mine)	8.78	/ 10
Bridger	2.13	0.70	Red Lodge	6.91	6.40
Busby	5.39	3.13	Wilsall	3.64	
Campbell Farm	3.73	0.00	Wilsall 8 ENE	6.58	r 05V
Columbus	2.54	3.93	Wyola	5.68	5.35**
Crow Agency	6.26	5.28	Yellowstone Park NE	14.61	
Gardiner	2.85		Entrance		
Hardin	4.46				
Huntley Exp. Station	3.66	3.55			

*Means for short-term period of record 1955.

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